

AMENDMENTS TO THE CLAIMS

1-21. (CANCELED)

22. (NEW) A method for testing pulsatile endurance of a vascular implant comprising:

- a. providing a resilient insert,
- b. inserting the insert into the vascular implant, and
- c. repeatedly expanding and contracting the insert, thereby expanding and contracting the implant.

23. (NEW) The method of claim 22 wherein:

- a. the insert has a cavity therein, and
- b. the insert is repeatedly expanded and contracted by repeatedly increasing and decreasing the pressure in the cavity.

24. (NEW) The method of claim 23 wherein the walls of the insert surrounding the cavity are from 0.03 to 0.2mm thick.

25. (NEW) The method of claim 23 wherein the pressure in the cavity is increased by supplying the cavity with a fluid under pressure.

26. (NEW) The method of claim 25 wherein the fluid is air or saline solution.

27. (NEW) The method of claim 22 wherein the insert is a flexible tube which is closed at one end.

28. (NEW) The method of claim 22 wherein the insert is formed from one of the following materials:
- a. latex rubber,
  - b. silicone rubber, or
  - c. polyurethane.
29. (NEW) The method of claim 22 wherein the insert comprises a contraceptive condom.
30. (NEW) The method of claim 22 wherein the frequency of expansion and contraction of the insert is from 50 to 100Hz.
31. (NEW) The method of claim 22 wherein the implant is at least partially immersed in saline solution during expansion and contraction.
32. (NEW) The method of claim 22 wherein:
- a. the implant is a furcated graft having two or more branches extending from a juncture, and
  - b. two or more of the inserts are employed, at least one insert being situated in each branch of the bifurcation.
33. (NEW) The method of claim 22 wherein the implant is a vascular graft with an internal diameter from 2 to 50mm.
34. (NEW) The method of claim 22 wherein the steps of claim 22 are carried out continuously over a period of about 7 weeks.
35. (NEW) The method of claim 22 wherein the contraction of the implant is due only to its inherent resilience.

36. (NEW) The method of claim 22 wherein:
- a. a resilient outer sheath is provided, the implant being at least partially located in the sheath so that the implant presses against the sheath during the implant's expansion, and
  - b. the resilience of the sheath provides a compressive force to the implant.
37. (NEW) The method of claim 36 wherein the sheath is formed of the same material as the insert.
38. (NEW) A device for testing pulsatile endurance of a vascular implant comprising:
- a. a resilient insert having a cavity therein,
  - b. means for repeatedly increasing and decreasing the pressure in the cavity in order repeatedly to expand and contract the insert, thereby repeatedly expanding and contracting the implant into which, in use, the insert is inserted.
39. (NEW) The device of claim 38 wherein the insert is flexible tube which is closed at one end.
40. (NEW) The device of claim 38 wherein the means for repeatedly increasing and decreasing the pressure in the cavity can provide a frequency of expansion and contraction of the insert of from 50 to 100Hz.
41. (NEW) The device of claim 38 wherein the means for repeatedly increasing and decreasing the pressure in the cavity is a source of compressed air.
42. (NEW) The device of claim 38 additionally comprising a resilient outer sheath in which the implant is at least partially located, the sheath providing a compressive force when the implant expands against the sheath.

43. (NEW) A device for testing pulsatile endurance of a vascular implant comprising a resilient insert having a cavity therein, wherein:
- a. the vascular implant is fit about the resilient insert, and
  - b. the insert is repeatedly flexed by pressure variations in the cavity,
- wherein the insert bears against the interior of the vascular implant during flexure.